

Dr. Venkata Ramana Naik N

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Area(s) of Interest: Advanced PWM techniques, Multi-level Inverters / Converters, Speed control strategies for Induction/synchronous and BLDC/PMSM motor drives, Electric Vehicle (EV), EV Charging, DAB converters, Solar PV, Micro Grid, and applications of Fuzzy/ Neural/ Neuro-fuzzy/Machine-learning based control.

Summary of Experimental, Teaching, and Research Work Experience:

- Research experience in the area of Power Electronics and Electric Drives, DSP/dSPACE-DSP controllers, Intelligent Controllers, and Digital Controllers.
- Hands-on experience with various power level converters, PV applications, Field Oriented Control (FOC), and Direct Torque Control (DTC) of variable frequency drives (VFDs). design up to a three-phase five-level diode clamped inverter 0.65kV/25A from base level including soldering and PCB design for MOSFET driver, RCD snubber circuits, Dead band circuits, etc.
- Experience in m-file programming, MATLAB/Simulink, PSIM, and DSPACE/DSPs/ Micro-controllers.
- Experience in design of power circuit topology, analog and digital circuit design, dSPACE based control systems, the gate driving circuits and their protections, etc.
- Thirteen years of Research experience since 2010.
- Nine years of teaching experience including one-year pre Ph.D. experience.

EDUCATION BACKGROUND:

Educational Qualifications	Year	Institute/University
Ph.D. thesis is evaluated with in Electrical Engineering	2016	Indian Institute of Technology Roorkee, UK
M. Tech in Power Electronics	2009	Jawaharlal Nehru Technological University Anantapur, AP
B. Tech in Electrical and Electronics Engineering	2006	Sri Krishnadevaraya University Anantapur, AP
Intermediate in M.P.C	2002	Govt. Junior College, Atmakur, AP
10 th Class	2000	Sri Padmavathi High School, Atmakur, AP

RESEARCH PUBLICATIONS:

SCIE/Reputed International Journals:

1. Venkata Ramana Naik N and S. P. Singh, "A Novel Interval Type-2 Fuzzy Based Direct Torque Control of Induction Motor Drive Using Five-level Diode-clamped Inverter," *IEEE Transactions on Industrial Electronics*, vol. 68, no. 1, pp. 149-159, Jan. 2021. (Q1-journal; IF: 8.162) DOI: 10.1109/TIE.2019.2960738

2. Venkata Ramana Naik N, S. P. Singh, and A. K. Panda, "An Interval Type-2 Fuzzy Based DTC of IMD Using Hybrid Duty Ratio Control," *IEEE Transactions on Power Electronics*, vol. 35, no. 8, pp. 8443-8451, Aug. 2020. (Q1-journal; IF: 6.153) DOI: 10.1109/TPEL.2020.2965722
3. Venkata Ramana Naik N, Aurobinda Panda, and S. P. Singh, "A Three-Level Fuzzy-2 DTC of Induction Motor Drive Using SVPWM," *IEEE Transactions on Industrial Electronics*, vol. 63, no. 3, pp. 1467-1479, Mar. 2016. (Q1-journal; IF: 8.162) DOI: 10.1109/TIE.2015.2504551
4. Venkata Ramana Naik N and S. P. Singh, "A Comparative Analytical Performance of Fuzzy-2 DTC and PIDTC of Induction Motor Using DSPACE DS-1104," *IEEE Transactions on Industrial Electronics*, vol.62, no.12, pp.7350-7359, Dec. 2015. (Q1-journal; IF: 8.162) DOI: 10.1109/TIE.2015.2463758
5. Nishit Tiwary, Venkata Ramana Naik N, Anup Kumar Panda, A. Narendra, and Rajesh Kumar Lenka, "A Robust Voltage Control of DAB Converter with Super-Twisting Sliding Mode Approach," *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, vol. 4, no. 1, pp. 288-298, Jan. 2023, DOI: 10.1109/JESTIE.2022.3227007
6. A. Narendra, Venkata Ramana Naik N, A. K. Panda, and Nishit Tiwary, "A Comprehensive Review of PV-Driven Electrical Motors," *Solar Energy, Elsevier*, vol. 195, pp. 278-303, Jan. 2020. (Q1-journal; IF: 7.188), <https://doi.org/10.1016/j.solener.2019.09.078>
7. A. Narendra, Venkata Ramana Naik N, Anup Kumar Panda, and Rajesh Kumar Lenka, "Solar PV fed FSVSI based Variable Speed IM Drive using ASVM Technique", *Engineering Science and Technology an International Journal*, Elsevier, vol. 40, pp. 1-9, 101366, April 2023, <https://doi.org/10.1016/j.jestch.2023.101366> (Q1-journal; IF: 5.7)
8. M. Karthik, Venkata Ramana Naik N, A. K. Panda, and Sameer Kumar Behera, "A Robust Variable- λ Least Logarithmic Hyperbolic Cosine Function Adaptive Filtering-Based Control Algorithm for Grid-Connected Solar PV System" *Electric Power Systems Research, Elsevier, Accepted, Oct. 2023 (Q1-journal; IF: 3.99)*.
9. A. Narendra, Venkata Ramana Naik N, Tiwary, and A. K. Panda, "An Improved Performance of PV Fed IVC Induction Motor Drive Using Clamping Sequence Duty Ratio Control," *Int. Trans. Electr. Energy Sys., Wiley*, vol. 31, iss.11, pp. 1-15, Nov. 2021, (Q2-journal; IF: 2.639). <https://doi.org/10.1002/2050-7038.13064>,
10. N. Tiwary, Venkata Ramana Naik N, A. K. Panda, Rajesh Kumar Lenka, and A. Narendra, "Sliding Mode and Current-Observer Based Direct Power Control of Dual Active Bridge Converter with Constant Power Load," *Int. Trans. Electr. Energy Sys, Wiley*, vol. 31, iss. 5, pp. 1-17, May. 2021, DOI: 10.1002/2050-7038.12879 (Q2-journal; IF: 2.639).
11. A. Narendra, Venkata Ramana Naik N, Anup Kumar Panda, Nishit Tiwary, and Amit Kumar "A Single-Stage SPV fed Reduced Switching Inverter based Sensorless Speed Control of IM for Water Pumping Application," *Int. Trans. Electr. Energy Sys.*, Jun. 2022, <https://doi.org/10.1155/2022/3805791>, pp. 1-15, Jun. 2022, (Q2-journal; IF: 2.639).
12. M. Karthik, Venkata Ramana Naik N, and A. K. Panda, "A variable step size robust normalized least mean absolute third-based control scheme for a grid-tied multifunctional photovoltaic system," *Int. Jour. of Circuit Theory and App.*, 1-22, May. 2023, <https://doi.org/10.1002/cta.3618>
13. Nishit Tiwary, Venkata Ramana Naik N, Anup Kumar Panda, Rajesh Kumar Lenka, and A. Narendra, "Integral Sliding Mode Based Direct Power Control of Isolated DC-DC Converter for Improved Voltage Regulation," *Int. Jour. of Circuit Theory and App. Wiley*, vol.50, iss.10, pp.3307-3324, May. 2022 <https://doi.org/10.1002/cta.3342> (Q2-journal; IF: 2.378).
14. Venkata Ramana Naik N, Jose Thankachan, and S. P. Singh, "A Neuro-Fuzzy Direct Torque Control Using Bus-Clamped Space Vector Modulation," *IETE Technical Review*, pp. 205-217, vol. 33, iss. 2, Mar. 2016. (Q2-journal; IF:1.932).
15. M. Karthik, Venkata Ramana Naik N, A. K. Panda, and Sameer Kumar Behera, "A Robust Generalized Soft-Root-Sign Adaptive Filter Algorithm for a Grid-Coupled PV System" *Electrical Engineering, Springer, Accepted, Oct. 2023. (Q2-journal; IF:1.8)*
16. Satyabrata Behera, Venkata Ramana Naik N, A. K. Panda, and Sameer Kumar Behera "Advanced Off-Board Bidirectional Electric Vehicle Charger with Enhanced Power Quality and Supporting Grid Resilience," *Electrical Engineering, Springer, Accepted, Nov. 2023. (Q2-journal; IF:1.8)*
17. A. Narendra, Venkata Ramana Naik N and Anup Kumar Panda "A Combinational Sequence Duty Ratio Control of SPV fed Variable Speed Induction Motor Drive using Field Oriented Control", *Electric*

Power Components and Systems, Taylor & Francis, vol. 50, pp. 571-583, Nov. 2022. DOI:10.1080/15325008.2022.2137742 (Q3-journal; IF:1.424)

18. Venkata Ramana Naik N and S. P. Singh, "Improved Torque and Flux performance of Type-2 Fuzzy Based DTC Induction Motor Using Space Vector Pulse-width Modulation," *Electric Power Components and Systems*, vol. 42, pp. 658-669, Mar. 2014. (Q3-journal; IF:1.424)
19. Prerana Mohapatra, Venkata Ramana Naik N, A. K. Panda, Rajesh Kumar Lenka, and Laxmidhar Senapati, "ANF-MAP based Multipurpose Control Approach for Single-Stage Grid-Connected PV System" *IEEE Transactions on Industrial Electronics*, **Minor Revision-2**, Oct. 2023.
20. Sameer Kumar Behera, Anup Kumar Panda and Venkata Ramana Naik N "A Seamless Enhancing Grid Stiffness Control Strategy for Harmonic Compensation and Power Ripple Mitigation in grid-tied Virtual Synchronous Generator System." *IEEE Transactions on Industrial Informatics*, **Under Revision**, Sept. 2023.
21. Sameer Kumar Behera, Anup Kumar Panda, Venkata Ramana Naik N, and R. K. Saket "An Elevated Control Strategy for Harmonic Compensation and Power Ripple Mitigation in a Self-synchronized Grid-Tied Virtual Synchronous Generator System," *IEEE Transactions on Power Electronics*, **Under Revision1**.
22. Satyabrata Behera, Venkata Ramana Naik N, Anup Kumar Panda, Sameer Kumar Behera, and Nishit Tiwary "An Enhanced Grid-tied Off-Board Electric Vehicle Charger with Improved Power Quality Using Unified Control Approach" *IEEE Transactions on Power Electronics*, **Major Revision**.
23. Prerana Sameer Kumar Behera, Anup Kumar Panda and Venkata Ramana Naik N "Power Quality Improvement of Grid Interfaced Solar PV system using an Improved LMS based Unified Control Technique" *International Journal of Circuit Theory and Applications*, Wiley, **Minor Revision2**, Oct. 2023.
24. Sameer Kumar Behera, Anup Kumar Panda and Venkata Ramana Naik N "Adaptive Active and Reactive Power Control Strategy for Virtual Synchronous Generator" *International Journal of Circuit Theory and Applications*, Wiley, **Minor Revision2**, Sept. 2023.

Books/Book-Chapters Published/Accepted:

1. M.Karthik, V. R. Naik, A. K. Panda, P. Mohapatra, and S.K. Behera, "Development of Control Schemes for Grid-Tied PV System to Enhance Power Quality," Custom Power Devices for Efficient Distributed Energy System, Elsevier (**Abstract proposal is Accepted**).
2. Prerana Mohapatra, Venkata Ramana Naik N, and Anup Kumar Panda, for the book chapter 6 entitled "Machine Learning based SoC Estimation : A Recent Advancement in Battery Energy Storage System," for a book titled "Energy Storage Technologies in Grid Modernization," Wiley-Scrivener, Scrivener Publishing house, Beverly, MA 01915-6106, USA, , Jul. 2023 <http://dx.doi.org/10.1002/9781119872146.ch6>, ISBN:9781119872146
3. Nishit Tiwary, Venkata Ramana Naik N, Anup Kumar Panda, Rajesh Kumar Lenka, and Ankireddy Narendra, proposal for a book Chapter-14 entitled "Isolated Bidirectional Dual Active Bridge (DAB) Converter for Photovoltaic System- An Overview" for the book title on "Wind and Solar Energy Applications," **CRC Press, Taylor & Francis Group**, pages. 13, 2023, ISBN: 9781003321897, <https://doi.org/10.1201/9781003321897>
4. Rajesh Kumar Lenka, Anup Kumar Panda, Venkata Ramana Naik N, Laxmidhar Senapati and Nishit Tiwary, a proposal for book Chapter-20 entitled "Multifunctional PV Integrated Bidirectional Off-Board EV Battery Charger Targeting Smart Cities" for the book title on "Wind and Solar Energy Applications" **CRC Press, Taylor & Francis Group**, 1st Edition, pages. 13, 2023, ISBN: 9781003321897, <https://doi.org/10.1201/9781003321897>
5. Ankireddy Narendra, Venkata Ramana Naik N, and Anup Kumar Panda, a proposal chapter-2 titled "Design of Power Electronic Devices in the Domain of Energy Storage," for the Book title of "Emerging Trends in Energy Storage Systems and Industrial applications (ETESSIA-2021)," ISBN: 978-0-323-90521-. pp. 27-65, **Elsevier, 2023**, <https://doi.org/10.1016/B978-0-323-90521-3.00008-9>.
6. Anup Kumar Panda, Nishit Tiwary, and Venkata Ramana Naik N, book Chapter-13 entitled on "Overview of Control Strategies and Design of Isolated Bidirectional Dual Active Bridge Converter for Renewable Energy Systems," for the book titled on "DC-DC Converters for Future Renewable Energy Systems," e-Book ISBN: 978-981-16-4388-0, DOI: 10.1007/978-981-16-4388-0, pp. 253-275, Energy Systems in Electrical Engineering, **Springer**, 2022. ISBN:978-981-16-4390-3

7. Venkata Ramana Naik N and S. P. Singh, "Multi-Level Inverter Fed Induction Motor Drive" *Academic Publishing*, Aug. 2017. (ISBN: 978-620-2-00652-1).

International/National Conferences:

1. Markala Karthik, Satyabrata Behera, Venkata Ramana Naik N, A. K. Panda, Sameer Kumar Behera, Laxmidhar Senapati, and "Weibull M-transform LMS-Based Control Scheme for Grid-Connected Photovoltaic System," *49th Annual Conference of the IEEE Industrial Electronics Society (IECON-2023)*, 2023, **Accepted**.
2. Satyabrata Behera, Venkata Ramana Naik N, A. K. Panda, Sameer Kumar Behera, Laxmidhar Senapati, and Markala Karthik "Design and Implementation of a Domestic Off-Board Multifunctional Bidirectional Electric Vehicle Charger," *49th Annual Conference of the IEEE Industrial Electronics Society (IECON-2023)*, 2023, **Accepted**.
3. Prerana Mohapatra, Venkata Ramana Naik N, A. K. Panda, and N. Tiwary, "Normalized Gaussian Kernel LMS controlled Grid interactive PV based EV Charging Station," *47th Annual Conference of the IEEE Industrial Electronics Society (IECON-2021)*, pp. 1-6, Oct. 2021, **DOI: 10.1109/IECON48115.2021.9589993**.
4. Venkata Ramana Naik N "An Interval Type-2 Fuzzy Based DTC of IMD Using Hybrid Duty Ratio Control," *13th IEEE International Conference on Power Electronics and Drive Systems (PEDES)-2019, Toulouse, France*, pp.1-3, Jul. 2019.
5. Markala Karthik, Venkata Ramana Naik N, and A. K. Panda," Hyperbolic Secant LMS Algorithm to Enhance Performance of a Three-Phase Single-Stage Grid Connected PV System" *2023 IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT-2023)*, Male city, Maldives, pp. 1–6, Mar. 2023.
6. P. Daramukkala, K. B. Mohanty, M. Karthik, S. D. Swain, B. P. Behera, and Venkata Ramana Naik N, "Normalized Sigmoid Function LMS Adaptive Filter based Shunt Hybrid Active Power Filter for Power Quality Improvement," in *Proc. IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT-2023)*, Male city, Maldives, pp. 1–6, Mar. 2023.
7. Venkata Ramana Naik N and S. P. Singh, "Improved Dynamic Performance of Type-2 Fuzzy Based DTC Induction Motor Using SVPWM," *International IEEE Conf. Proc, PEDES-2012, IISc Bangalore*, pp. 1-5, Dec. 2012.
8. A Narendra and Venkata Ramana Naik N, "An Experimental Validation of single-phase AC power Generation from PV using H-bridge Inverter," *8th IEEE International Conference on PEDES-2018, IIT Madras*, pp. 1-5, 2018.
9. Venkata Ramana Naik N and S. P. Singh, "Improved Dynamic Performance of Direct Torque Control at low speed over a scalar control," *International IEEE Conf Proc, INDICON-2013, IIT Bombay*, pp. 1-5, Dec. 2013.
10. Ankireddy Narendra, Venkata Ramana Naik N, Anup Kumar Panda, Rajesh Kumar Lenka, Ismail Hossain and T.Dilleswar Rao, "Universal Motor Drive based Drip Irrigation using PV or Grid System" *11th National Power Electronics Conference (NPEC)-2023, IIT Guwahati*, **Accepted, Oct. 2023**.
11. Venkata Ramana Naik N. "A Real-time Enactment of Fuzzy Based Direct Torque Control of Induction Motor Drive with DS-1104," *10th International Conference on Computing, Communications and Networking Technologies (ICCCNT-2019), IIT Kanpur*, pp.1-5, Jul. 2019.
12. A Narendra, Venkata Ramana Naik N, Anup Kumar Panda, and Nishit Tiwary, "A Real-Time Implementation of PV Driven DC Motor along with Wireless Control". *10th International Conference on Computing, Communications and Networking Technologies (ICCCNT-2019), IIT Kanpur*, pp.1-4, July 2019.
13. Prerana Mohapatra, Venkata Ramana Naik N, Anup Kumar Panda, and Nishit Tiwary, "Kernel-Based Affine Projection Algorithm for three-phase Grid-connected Solar PV System," *10th National Power Electronics Conference (NPEC-2021)*, **pp. 1-5, IIT Bhubaneswar, 2021**.

14. Markala Karthik, Venkata Ramana Naik N, and A. K. Panda, "A Robust Generalized Modified Blake–Zisserman Adaptive Filter-Based Control Scheme for Grid-Tied PV System to Improve Power Quality," **10th IEEE International Conference on PEDES-2022**, MNIT Jaipur, pp. 1-6, Oct. 2022
15. Markala Karthik, Venkata Ramana Naik N, and A. K. Panda, "A Variable Step Size Logarithmic Hyperbolic Cosine Adaptive Filtering-Based Control Scheme for Grid-Tied PV-DSTATCOM to Enhance Power Quality," **10th IEEE International Conference on PEDES-2022**, MNIT Jaipur, pp. 1-6, Oct. 2022
16. Nishit Tiwary, Venkata Ramana Naik N, Anup Kumar Panda, Rajesh Kumar Lenka, and Ankireddy Narendra, "Super Twisting Sliding Mode Control of Dual Active Bridge DC-DC Converter," **9th IEEE International Conference on PEDES-2020, MNIT Jaipur**, pp. 1-5, 2020.
17. A Narendra, Venkata Ramana Naik N, and Nishit Tiwary, "PV fed Separately Excited DC Motor with a Closed Loop Speed Control," **8th IEEE International Conference on PIICON-2018, NIT Kurukshetra**, pp. 1-5, 2018.
18. Venkata Ramana Naik N and S. P. Singh, "A two-level fuzzy-based DTC using PLLC to improve the induction motor performance," **7th IEEE International Conference on PEDES-2016, Trivandrum**, pp. 1-5, 2016.
19. Venkata Ramana Naik N, S. P. Singh, and G. Durgasukumar, "An improved performance of F2DTC induction motor using five-level SVM," **7th IEEE International Conference on PEDES-2016, Trivandrum**, pp. 11-16, 2016.
20. Venkata Ramana Naik N and S. P. Singh, "A Comparative Study of V/f Controlled IM Using Two and Three-Level Bus Clamped SVM," **International IEEE Conf, IICPE -2014, NIT Kurukshetra**, pp. 1-6, Dec. 2014.
21. Venkata Ramana Naik N and S. P. Singh, "A NF Based Direct Torque Control of Induction Motor Drive Using BCSVM," **International IEEE Conf, IICPE -2014, NIT Kurukshetra**, pp. 10-11, Dec. 2014.
22. N. Tiwary, Venkata Ramana Naik N, A. K. Panda, and A. Narendra, "Direct Power Control of Dual Active Bridge Bidirectional DC-DC Converter," **International Conference on Power Electronics, Control and Automation (ICPECA), Jamia Millia Islamia University, New Delhi, India**, pp. 1-4, Nov. 2019
23. N. Tiwary, Venkata Ramana Naik N, A. K. Panda, A. Narendra, and Rajesh Kumar Lenka, "Fuzzy Logic Based Direct Power Control of Dual Active Bridge Converter," **2021 IEEE International Conference on Power Electronics and Energy (ICPEE), Bhubaneswar, pp. 1-5, 2021**
24. Rajesh Kumar Lenka, A. K. Panda, Ashish Ranjan Dash, Venkata Ramana Naik N, and N. Tiwary, "Reactive Power Compensation using Vehicle-to-Grid enabled Bidirectional Off-Board EV Battery Charger," **2021 IEEE International Conference on Power Electronics and Energy (ICPEE), Bhubaneswar**, pp. 1-5, 2021.
25. A. Narendra, Venkata Ramana Naik N, A. K. Panda, and N. Tiwary, "Modelling and Analysis of Grid-tied Solar PV System," **2019 International Conference on Power Electronics, Control and Automation (ICPECA), Jamia Millia Islamia University, New Delhi, India**, pp. 1-5, Nov. 2019.
26. Venkata Ramana Naik N and S. P. Singh, "Improved Dynamic Performance of Fuzzy Based DTC Induction Motor Using Bus-Clamped SVM," **International IEEE Conf. Proc, IICPE-2012, Delhi University**, pp. 1-6, Dec. 2012.
27. Venkata Ramana Naik N and S. P. Singh, "A Novel Type-2 fuzzy Logic Control of Induction Motor Drive Using Scalar Control," **International IEEE Conf. Proc, IICPE-12, Delhi University**, Dec. 2012.
28. Venkata Ramana Naik N and S. P. Singh, "A Novel Type-2 fuzzy Logic Control of Induction Motor Drive using Space Vector PWM," **International IEEE Conf. Proc, INDICON-12, Kochi**, pp. 1142-1147, Dec. 2012.
29. Venkata Ramana Naik N, K. Sri Gowri, and T Brahmananda Reddy, "A Novel Hybrid Space vector PWM for Reduced Current Ripple Using Scalar Control," **International Conf. Proc, ICETES-10, Noorul Islam University, Kumaracoil**, pp. pp.25-29, Mar. 2010.

30. Venkata Ramana Naik N and K. Sri Gowri, "Space Vector Based Hybrid Pulse width Modulation for Reduced Current Ripple," *National Conf. Proc, NCIES-09, Salem*, pp. 15-21, April. 2009.
31. M. Karthik, Venkata Ramana Naik N, and A. K. Panda, "Enhancement of Power Quality in a Grid-Connected Photovoltaic System using Robust Modified Champernowne Function Adaptive Filter and DSOGI-FLL," in Proc. IEEE International 3rd Conference on Smart Technologies for Power, Energy and Control (STPEC), Dec. 2023, pp. 1–6, **Accepted, Sept. 2023.**
32. Abhijeet Kumar, Venkata Ramana Naik N, M. Karthik, and Satyabrata Behera, "Solar PV based Boost Multi Level Inverter for Inductive," in Proc. IEEE International 3rd Conference on Smart Technologies for Power, Energy and Control (STPEC), Dec. 2023, pp. 1–6, **Accepted, Sept. 2023.**
33. Ch. Revanth Kumar Reddy, V. Naik N, Satyabrata Behera and M. Karthik, "Dual Active Bridge Converter Based Battery Charging System for Electric Vehicle Applications," in Proc. *IEEE International Conference on Cyber Physical Systems, Power Electronics and Electric Vehicles*, Jun. 2023, pp. 1–6, **Accepted, July 2023.**
34. S. Ved Prakash, V. Naik N, M. Karthik, and Satyabrata Behera "SOGI-PLL Based Control Technique for the Single-Phase Single-Stage Grid Connected PV System," in Proc. *IEEE International Conference on Cyber Physical Systems, Power Electronics and Electric Vehicles*, Jun. 2023, pp. 1–6, **Accepted, July 2023.**

Total Citations Since 2013: No of Citation: 433, H-index: 12, i10-Index: 16

(from Google scholar link: @ <https://scholar.google.co.in/citations?user=Cud1J6AAAAAJ&hl=en>)

DST PROJECTS:

1. A sponsored project proposal total cost of **Rs. 27,99,764/** in *SERB as a PI* entitled on "Design and Control of a Fast and Efficient Electric Vehicle (EV) Charger for Domestic Installation" is **Sanctioned on 11-03-2022.**
2. Successfully finished the project on "Design and Control of Induction Motor with Solar Panels" with a cost of Rs. 93,000- from **Centre of Excellence, Renewable Energy Systems (CoE-RES) fund, NIT Rourkela on 14-09-2016.**
3. DST project proposal *as PI* entitled on "An Efficient PV Fuel-Cell Based Hybrid Energy System for Smart Cities" is **submitted to CRG-SERB** (CRG/2021/006718/EEC) **with a total cost of Rs. 36,96,800/-** **Status: Stage-2 Evaluation**

Ph.D. Guidance:

Currently, supervise a total of eight Ph.D. candidates. Out of eight, the first two candidates successfully defended their Ph.D. The third and fourth students finished their progress registration seminar, whereas the 5th -8th are in the completion stage of the coursework. A brief status of Ph.D. Scholars are as follows as

1. **Name:** Ankireddy Narendra, NIT Rourkela **Supervisor Type:** Main
Status of Research: Defended on 18-05-2023
Thesis Title: An Investigation on Solar PV Power-fed Induction Motor Drive
SCI/ SCIE Journals: 5
Conferences: 4
2. **Name:** Nishit Tiwary, NIT Rourkela **Supervisor Type:** Main
Thesis Title: An Investigation on Robust Control of Isolated DC-DC Dual Active Bridge Converter
Status of Research: Defended on 29-05-2023
SCI/SCIE Journals: 3
Conferences: 3
Book chapter: 2
3. **Name:** Prerana Mohapatra, NIT Rourkela. **Supervisor Type:** Main
Research Topic: Machine Learning Controlled Three-Phase PV-BES Grid-tied System
Status: Completed Registration as well as progress seminar

Conferences: 2

4. **Name:** Sameer Kumar Behera, NIT Rourkela. **Supervisor Type:** Co
Research Topic: Integration of Renewable Energy based Distributed Generation System
Status: Completed Registration as well as progress seminar
5. **Name:** Markala Karthik (QIP), NIT Rourkela. **Supervisor Type:** Main
Research Topic: Shunt Active Power Filters for Power Quality Improvement
Status: Completed Registration seminar
SCI/SCIE Journals: 1
Conferences: 2
6. **Name:** Nitu Panda, NIT Rourkela. **Supervisor Type:** Main
Research Topic: Renewable Energy
Status: At the Course work completion stage, Got 6th rank in Odisha Renewable Energy Development Agency (OREDA) exam, 26/07/2022 and will be joining as Assistant Director at OREDA, Dept of Energy, Govt of Odisha
7. **Name:** Satyabrata Behera, NIT Rourkela. **Supervisor Type:** Main
Research Topic: Design and Control of Fast and Efficient Electric Vehicle (EV) Charges for Domestic Installation
Status: At the initial stage
No of Book chapters accepted:1
8. **Name:** Y China Venkata Kondiah , NIT Rourkela. **Supervisor Type:** Co
Research Topic: Wind Energy Conversion Systems
Status: At the initial stage

M. Tech Guidance:**No of M.Tech students Guided till now: 24**

1. CHANDAN BEHERA (712EE4082) from PED: Sensorless Control of Brushless DC motor drive based on Back EMF detection method, Supervisor, 2016-17 Spring.
2. MARISERLA VINEETH KUMAR (215EE4156) from PED: Study of Induction Motor Drive With Direct Torque Control Scheme Using Space Vector Modulation and Fuzzy Logic Controller, Supervisor, 2016-17 Spring.
3. RAYANA SIVA PAVAN (215EE4162) from PED: Study of Induction Motor Drive with Indirect Vector Control Using Space Vector Pulse Width Modulation, 2016-17 Spring.
4. PAGADALA BALAKRISHNA (215EE4252) from PED: Modular Cascaded H-Bridge Multilevel Inverter with Distributed MPPT for Grid-Connected Application, 2016-17 Spring.
5. PRAKASH KUMAR (713EE3082) from CA: Control of Single-Phase Photovoltaic Grid-Connected System, Supervisor, 2017-18 Spring.
6. BANOTH SURESH (216EE4294) from PED: Sensorless Vector Control of Induction Motor Based on MRAS Control, Supervisor, 2017-18 Spring.
7. ESLAVATH LAKPATHI (216EE4304) from PED: Performance Analysis of Shunt Active Power Filter Using Different Switching Signal Generation Techniques, Supervisor, 2017-18 Spring.
8. HARISH DORA MONGAM (216EE5320) IE: Performance Analysis of Shunt Active Power Filter (SAPF) using p-q and d-q theories, Supervisor, 2017-18 Spring.
9. KAVETI ASHOK KUMAR (713EE3081) from CA: Performance and Analysis of Three-Phase Photovoltaic Grid-Connected System, Supervisor, 2018-19 Spring.
10. SATYAJEET (217EE4175) from PED: Simulation of cost-effective speed control of BLDC motor drive Supervisor, 2018-19 Spring.
11. CHIRANJEEVI EDIGA (217EE4443) from PED: Design and Development of highly efficient PFC-based AC-DC Driver for AC grid-fed LED lighting, Supervisor, 2018-19 Spring.
12. SHAKTI SOURAV PANDA (715EE4095) from PED: Simulation of Three-phase PMSM Motor from Current controlled Voltage Source Inverter, Supervisor, 2019-20 Spring.
13. SAIPRAKASH RAO (218EE4159) from PED: Torque Ripple Reduction in BLDC Motor Using Buck-

Boost Converter Supervisor, 2019-20 Spring.

14. Bikash Ranjan Panda, ANN-based MPPT of solar PV system using boost converter, Supervisor, 2020-21 Spring.
15. Vishal C Pusadkar, Renewable energy sourced based EV charging station using Sliding Mode Control, Supervisor, 2020-21 Spring.
16. Sanjay Kumar Nayak, Modelling and Control of a Grid-connected PV system, Supervisor, 2020-21 Spring.
17. Saurav Kumar Kar, Simulation on Direct Torque Control of Induction Motor Using SVPWM, Supervisor, 2020-21 Spring.
18. Dipankar Jena, Design and Simulation of Three-Phase Seven Level Inverter Fed Induction Motor Drive With Three Cascaded H-Bridge Configuration, Supervisor, 2020-21 Spring.
19. Ketan Giridhar Gujar (220EE4316), "Comparative Evaluation of Pulse Width Modulation Techniques in terms of Total Harmonic Distortion for Permanent Magnet Synchronous Motor Drive" - M.Tech., Supervisor, 2021-22 Spring.
20. Mallapu Bhuvaneshwar Reddy (220EE4311), "Solar PV based Boost Multi-level Inverter for EV applications" - M.Tech., Supervisor, 2021-22 Spring
21. Rohit Bowade (220EE4314), "An Enhanced Speed Control of Pv Fed Brushless DC Motor Drive" - M.Tech., Supervisor, 2021-22 Spring.
22. Abhijeet Kumar (221EE4437), "Solar PV Based Boost Multilevel Inverter for EV Application" - M.Tech., Supervisor 2022-23 Spring.
23. Cheruku Revanth Kumar Reddy (221EE4446), "Dual-Active Bridge Converter based Battery Charging System for Electric Vehicle Applications" - M.Tech., Supervisor 2022-23 Spring.
24. Sherla Ved Prakash (221EE4449), "SOGI-PLL based control technique for the single-phase single-stage grid connected PV system." - M.Tech. Supervisor 2022-23 Spring

Currently, four candidates are doing the M.Tech project work under my supervision.

B.Tech Guidance:

No of B.Tech students Guided till now: 18

1. Anurag Baral (119EE0617), Maheshwar Parida (119EE0255), "V/f CONTROL OF INDUCTION MOTOR DRIVE" - B.Tech., Supervisor, 2022-23 Spring.
2. Ashutosh Naik (119EE0641), Rinkesh Maruti Behera (119EE0618), "Solar PV-based Boost Multilevel Inverter for Electric Vehicle Applications" - B.Tech., Supervisor, 2022-23 Spring.
3. Ramavath Rahul (119EE0612), Tammineni Sai Gowtham (119EE0881), "CLOSED LOOP V/f CONTROL OF INDUCTION MOTOR USING SVPWM" - B.Tech., Supervisor, 2022-23 Spring.
4. Sibjit Sahoo (112EE0258) and Syed Abrar Ahmed Quadri (112EE0508), "Voltage Sag Mitigation in Power Distribution Systems" - B.Tech. Supervisor 2015-16 Spring.
5. Paul Kujur (113EE0255) and Sai Teja Kolli (113EE0254), "Analysis and Simulation of Direct Torque Controlled Induction Motor Drive" - B.Tech. Supervisor 2016-17 Spring
6. Waheedullah (113EE0614), "V/F Control of Induction Motor Drive" B.Tech., Supervisor 2017 Summer.
7. Amrit Mohapatra (114EE0154), Azmeera Harshith Kumar (114EE0439), and Gagan Kumar Sahu (114EE0166), "Solar PV Based Inverter for Household Pumping Application" - B.Tech., Supervisor, 2017-18 Spring.
8. Dhruval Raj Aditya (116EE0288), "Closed-loop control of induction motor by V/f method & Direct torque control of 3 phase 4 switch inverter fed induction motor drive" - B.Tech., Supervisor, 2019-20 Spring.
9. Sukumar Dehuri (116EE0302), "Space Vector Pulse Width Modulation Based Boost Inverter" - B.Tech., Supervisor, 2019-20 Spring.
10. Bharti Pandit (117EE0380), "Credit Card Fraud Detection Using Machine Learning" - B.Tech.,

Supervisor, 2020-21 Spring.

11. Biswajeet Mohanty (117EE0760), "Design of Multilevel Inverter for Electric Vehicle" - B.Tech., Supervisor, 2020-21 Spring.
12. Biswajit Naik (117EE0376), "An enhance hybrid shunt active power filter for non-linear load application" - B.Tech., Supervisor, 2020-21 Spring.
13. Manish Kumar Nayak (117EE0377), "A Comparative Analysis of PV Based Boost and Bidirectional DC-DC Converter" - B.Tech., Supervisor, 2020-21 Spring.
14. Chandan Behera (712EE4082), "Sensorless Control of Brushless DC motor drive based on Back EMF detection method" - B.Tech. M.Tech Dual Degree, Supervisor 2016-17 Spring.
15. Prakash Kumar (713EE3082), "Control of Single-Phase Photovoltaic Grid-Connected System" - B.Tech. M.Tech Dual Degree, Supervisor, 2017-18 Spring.
16. Kaveti Ashok Kumar (713EE3081), "Three-Phase Photovoltaic Grid-Connected System" - B.Tech. M.Tech Dual Degree, Supervisor, 2018-19 Spring.
17. Shakti Sourav Panda (715EE4095), "Simulation of Three-phase PMBLDC Motor from Current Controlled Voltage Source Inverter" - B.Tech. M.Tech Dual Degree, Supervisor, 2019-20 Spring.
18. Dipankar Jena (716EE4098), "Design and Simulation of Three-Phase Seven Level Inverter Fed Induction Motor Drive With Three Cascaded H-Bridge Configuration" - B.Tech. M.Tech Dual Degree, Supervisor, 2020-21 Spring.

Currently, three candidates are doing the project work under my supervision.

ADMINISTRATIVE RESPONSIBILITIES:

1. Co-PIC of the institute-level for Lawn & Garden and Cleaning services from 1st July 2022
2. PIC for development of Research Laboratory EE-106 in Electrical Engg. Dept., NIT Rourkela from 20/05/2022
3. Faculty advisor for the M.Tech PED 2020 batch in Electrical Engg. Dept., NIT Rourkela
4. Continuing as PIC of Power Electronics Lab, Electrical Engg. Dept., NIT Rourkela since 2020 July
5. Continuing as PIC of Cleaning and Maintenance, Electrical Engg. Dept., NIT Rourkela since July 2020
6. PIC of Departmental Infrastructure in Electrical Engg. Dept., NIT Rourkela from July 2018 to 2021
7. Faculty advisor for the B.Tech in Electrical Engg. Dept., NIT Rourkela from 2016 to 2020
8. Continuing as BOS member for RGM CET, Autonomous, Nandyal, affiliated to JNTU Anantapur, AP, since 2019

Short-Term Courses/Workshops /Conferences from the Working Institute

1. Keynote speaker on August 13, 2023, entitled "EV with Advanced Artificial Intelligence control and IoT Application" in **National Conference** on the theme of "Artificial Intelligence and IoT in Agriculture and Food Industry 4.0 (AIIAF-2023)" organized by **The Institution of Engineers (THE)** India, Rourkela IEI Local Centre, India August 12-13, 2023.
2. Organized a **NaMPET-III** funded Online five-day Short Term Course (STC) on Power Electronics Converter Applications in Microgrid and Vehicular Technology (**PECAMVT-2022**), **NIT Rourkela**, from 20th July to 24th July 2022.
3. Gave an expert talk on 20-07-2022, "**An Advanced Control Strategy for EV and Micro-grid Applications**" in a **NaMPET-III** funded online five-day Short Term Course (STC) on "Power Electronics Converter's Applications in Microgrid and Vehicular Technology (**PECAMVT-2022**)", **NIT Rourkela**, from 20th July to 24th July 2022.
4. **Technical session chair** of "Advanced Artificial Intelligence applications," in 4th Innovative Product Design and Intelligent Manufacturing systems: Hybrid Mode Conference (IPDIMS 2022), NIT Rourkela, 25-26 November 2022.
5. Member of the **Student Organizing Committee** for **CERA-13 IEEE International conference** during Ph.D., Electrical Engineering Department, **IIT Roorkee**, 2013

OUTREACH ACTIVITIES:

1. Gave an expert talk on 13 Dec. 2022, “**Analysis of Hybrid PWM Techniques for Reduction of Induction Motor Current Ripples in EV Applications**” One-Week Short-Term Training Program (Online) on Emerging Trends in Electric Vehicles (EVs) and Renewables (ETER- 2022), Date: 12th-16th Dec. 2022, Dept of Electrical Engg, **SVNIT Surat**.
2. **Expert talk** is given on 27th July 2022, entitled “A Detailed Investigation on Current Ripple Minimization of Induction Motor for Two-level Inverter Application,” in the one-week online short-term course "Emerging Trends in Power and Energy Systems (**ETPES-2022**)" organized by the Department of Electrical Engineering, **NIT Delhi** from 26th July 2022 to 31st July 2022.
3. **Expert Lecture** given entitled “Investigation on Current Ripple Improvement of Induction Motor Drive using Hybrid Pulse Width Modulation for EV Application” in **IEEE PELS/IAS/PES Joint Chapter, Vizag Bay Section, NIT Andhra Pradesh**, on 22nd October 2021.
4. Expert talk on “**An advanced Control Techniques for EV Charging Applications**”, 11-01-2023, 2-4PM five days National level online Faculty Development Program (Online) on Advanced Power Electronics Converters for RES and EV applications (APERESEVA- 2023), Date: 9th-13th Jan. 2023, Dept of Electrical Engg, at RGM CET, Autonomous, Nandyal, **affiliated to JNTU Anantapur, AP**.
5. Reviewer in IEEE International Symposium on sustainable energy, signal processing, and cyber security (**IEEE-iSSSC 2020**), 16th -17th December 2020, GIET University Gunpur, Orissa state, India.
6. Session Chair in the National Conference **JNANA CHILUME-2020 “Automation, Control, and Communication”** at Faculty of Engineering and Technology, JAIN (Deemed-to-be University), on 25th November 2020.
7. An external expert for conducting the final viva voce of M.Tech students in the field of Power Electronics and Drives, Electrical Engineering Department, **SVNIT Surat**, Gujarat, on 20-07-2017
8. An expert talk was given on “**Space Vector Based Hybrid Pulsewidth Modulation for Reduction of Reduction of Induction Motor Current Ripples**,” for the one-week workshop on “*Recent Trends and Advancements in Power Systems and Power Electronics*” Mar. 2nd-6th Mar. 2020, Electrical Engineering Department, **NIT Raipur**, On 02.03.2020 (11.30 AM -01.00 PM & 02.00 PM – 03.30 PM).
9. An expert talk on “Grid Integration of Renewable Energy Sources,” was given in a one-week AICTE-sponsored Faculty Development Programme on “**Advances in Teaching and Research in the field of Green Energy and Sustainable Development**” from 2nd to 7th November 2020, On 07.11.2020 (09.30 AM -11.00), JNTU Anantapur, AP, India.
10. Reviewer for 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics, and Computer Engineering (**UPCON-2020**), November 27-29, 2020, MNIT Allahabad, Prayagraj, India.
11. Reviewer for 3rd IEEE International Conference on “Recent Developments in Control Automation and Power Engineering (**RDCAPE-2019**),” Amity University Uttar Pradesh, 10th -11th October 2019.
12. Reviewer for 9th IEEE Power Electronics, Drives and Energy Systems (**PEDES-2020**) International conference 16-19 December 2020, MNIT, Jaipur, Rajasthan, India.
13. On 26-08-2020 from 9:30-11:00, provided an expert speaker entitled “**Multi-level inverter fed Direct Torque Control of Induction Motor Drive**,” Academic-Conduct of Faculty Development Programme (FDP) on “Recent Advances in Electrical Power Engineering,” for teaching faculty of Electrical & Electronics Engineering working in various Govt. **Polytechnics** from 24/08/2020 to 28/08/2020, Organized by the **State Board of Technical Education and Training, Andhra Pradesh**.
14. On 24-09-2020 at 2:00 PM-3:30 PM, contributed an expert speaker entitled “**An Improved Current Ripple Performance of Induction Motor Drive for an Electrical Vehicle Applications**,” AICTE sponsored STTP on "AICTE-STTP Phase-3 on "Challenges in Electric Vehicular Battery Charging & Grid Integration Issues" held during 24-09-2020 to 30-09-2020, 2020 at RGM CET, Autonomous, Nandyal, **affiliated to JNTU Anantapur, AP**.
15. On 07-08-2020 at 10:30 AM-12:30 PM and 2:30 PM-4:30 PM, contributed an expert speaker on entitled “**Isolated DC-DC Converter for Photovoltaic Electric Vehicle Applications**,” AICTE sponsored STTP on "Challenges in Electric Vehicular Battery Charging & Grid Integration Issues" held during 03-

08-2020 to 08-08-2020, at 2020 at RGM CET, Autonomous, Nandyal, **affiliated to JNTU Anantapur, AP.**

16. On 03-07-2020 from 9:30-11:00, offered an expert speaker entitled “**Multi-level inverter fed Induction Motor Drive,**” the 5-Day National Level FDP on “**Recent Trends in Electric Drives & Control**” from 29-06-2020 to 03-07-2020 at RGM CET, Autonomous, Nandyal, **affiliated to JNTU Anantapur, AP.**
17. A talk on FDP was “**Recent Trends in Power Electronics for Grid Integration of Renewable Energy Systems**” on 2.12.2020 from 10 AM to 12 PM and 2 PM to 4 PM. Vasireddy Venkatadri Institute of Technology, Autonomous, **affiliated to JNTU Kakinada, AP.**
18. An invited lecture or seminar entitled “**Advanced Speed Control Methods for Induction Motors,**” **was given** at Vignan Institute of Technology and Science, Electrical Engineering Department, Hyderabad, Telangana State on 25 July 2019.
19. On 15-11-2018, gave an expert talk on “**Investigations on Direct Torque Control of Induction Motor Drive**” A one-week Faculty Development Program on “*Application of Artificial Intelligence and Soft Computing Techniques to Electrical Engineering,*” 13-17 Nov 2018,” given in GVEC, JNTU Kakinada, **AP.**
20. Since 2019, I was continuing as a BOS member of Rajeev Gandhi Memorial College of Engineering and Technology, Autonomous, Nandyal, affiliated to JNTU Anantapur.
21. Reviewer for *IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, Electrical Power Components and Systems, IET Power Electronics, IETE Technical Review, IETE Journal of Research, Solar Energy, and ISA TRANSACTIONS.*
22. After selection of Badminton Tournament for doubles in NIT Rourkela, **Participated in Inter NIT Badminton Tournament for doubles at MNIT Jaipur during Dec. 18-20, 2019.**

JOB EXPERIENCE:

Ad hoc Assistant Professor with teaching experience of approximately nine months from 17-08-2009 to 15-05-2010, **GPREC, Kurnool, AP.**

Assistant Professor Grade-II with 6000AGP from 20-08-2015 to 01-02-2018, *Electrical Engineering Department, National Institute of Technology Rourkela.*

Assistant Professor Grade-II with 7000AGP from 02-02-2018 to 12-02-2020, *Electrical Engineering Department, National Institute of Technology Rourkela.*

Assistant Professor Grade-I with 8000AGP from 13-02-2020 to until now, *Electrical Engineering Department, National Institute of Technology Rourkela.*

The subjects/courses handled until now as given below in detail as

Subjects Handled:

1. Basic Electrical Engineering for B.Tech
2. Electric Drives for B.Tech
3. Electrical Machines for B.Tech non-branch
4. Electrical Machines-II for B.Tech
5. Electrical Measurements and Instrumentation for B.Tech
6. Power Electronics for B.Tech non-branch
7. Special Machines for M.Tech
8. Network Theory for B.Tech

Currently handling a course of Electric Drives for B.Tech students

Labs Handled:

1. Power Electronics Lab
2. Electrical Network Simulation Lab
3. Basic Electrical Engineering
4. Power Electronics and Drives experimentation and Simulation
5. Network Theory

6. Electrical Machines
7. Power System
8. Power System Design

Research Laboratory Development:

For bidirectional DC-DC converters such as DAB converters, Solid state transformer (SST), PV micro-grid, efficient EV charging, and its speed control applications for prototype models.

Thesis:

Ph.D. Thesis Title: “Investigations on Direct Torque Control of Induction Motor Drive”

Supervisors: Prof. S. P. Singh, Electrical Engineering Department, IIT Roorkee.

The thesis was submitted in 25-08-2015

Defense Date: 03-02-2016

M. Tech Thesis Title: Space Vector-Based Hybrid Pulse Width Modulation for Reduced Current Ripple

B. Tech Thesis Title: Implementation of Multi-Featured DSP Based Inverter Fed Induction Motor with Improved Power Factor

SKILLS AND ACHIEVEMENTS:

Computer Languages: C, m-file programming, MATLAB/Simulink, PSIM,
MS Office, PSPICE, DSP, DSPICE, Control Desk, RT-LAB, OPAL-RT,
Software Packages: Lab VIEW, and FPGA.
Languages Known: Telugu (SRW), English (SRW), and Hindi (SRW)

1. **BRICS – Young Scientist 2022** on the thematic area of Artificial Intelligence, awarded in Xiamen Conclave, Fujian Province, China, through from National Institute of Advanced Studies, DST, Govt of India.
2. **Ph.D thesis** is evaluated with an overall **A-Grade**
3. **Received fellowship** from **MHRD** during full-time Ph.D. program
4. **Received fellowship** from **MHRD** during full-time M. Tech program
5. Secured a **third position** in the overall percentage during the M.Tech, 2009
6. Sanctioned a **sponsored project** proposal total cost of Rs. 27,99,764/ in SERB as a PI entitled on “Design and Control of a Fast and Efficient Electric Vehicle (EV) Charger for Domestic Installation” on 11-03-2022.
7. **Certificate of Appreciation** for keynote speaker entitled “EV with Advanced Artificial Intelligence control and IoT Application” in **National Conference** on the theme of “Artificial Intelligence and IoT in Agriculture and Food Industry 4.0 (AIIAF-2023)” organized by **The Institution of Engineers (THE)** India, Rourkela IEI Local Centre, India August 12-13, 2023.
8. **Certificate of Appreciation** on Expert talk on 13-12-2022, entitled " Analysis of Hybrid PWM Techniques for Reduction of Induction Motor Current Ripples in EV Applications", during one week STC in the “Emerging Trends in Electric Vehicles (EVs) and Renewables (ETER- 2022) held on 12-16, Dec. 2022, organized by Department of Electrical Engg, **SVNIT Surat**.
9. **Certificate of Appreciation** in IEEE International Symposium on sustainable energy, signal processing and cyber security (IEEE-iSSSC 2020), 16th -17th December 2020
10. **Certificate of Appreciation** on Expert talk entitled "A Detailed Investigations on Current Ripple minimization of Induction Motor for Two level inverter Applications", during one week STC in the "Emerging Trends in Power and Energy Systems" (ETPES-2022) held on 26-31, July 2022, organized by Department of Electrical Engg, **NIT Delhi**, 2022
11. **Certificate of Appreciation** on Expert talk in online AICTE, FDP on Advances in Teaching and Research in the Field of Green Energy and Sustainable, JNTUA College of Engineering, Kalikiri, Chittoor (Dist), AP, INDIA & Directorate of Faculty Development & IQAC, JNTUA, Ananthapuramu 2 –7 Nov. 2020.

12. **Certificate of Appreciation** in expert talk on “An advanced Control Techniques for EV Charging Applications”, 11-01-2023, 2-4 PM, 5 days National level online FDP on APERESEVA- 2023, RGM CET, Autonomous, Nandyal, affiliated to JNTU Anantapur, AP.
13. **EE106-Research Laboratory development, 20-05-2022**
14. **Certificate of Appreciation** in Blood Donation Camp, NIT Rourkela, 2020
15. **Certificate recognizes IEEE Senior Member 2022**
16. Certificate recognizes IEEE Industrial Electronics Society Senior member 2022
17. Certificate recognizes IEEE Young Professionals 2022
18. Secured 3rd place in slow cycling, **SPORTS CARNIVAL 2023**, NIT Rourkela, 2023
Reviewer for reputed journals like *IEEE Transactions on Industrial Electronics*, *IEEE Transactions on Power Electronics*, *Electrical Power Components and Systems*, *IET Power Electronics*, *IETE Technical Review*, *Solar Energy*, *ISA Transactions*, etc.

Extracurricular Activities:

1. IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies (GlobConHT-2023), *Participated*, Mar. 11-12, 2023
2. A Conference and the Tutorial Classes on **13th IEEE International Conference on PEDS-2019, Toulouse, France, Participated**, July 9-12th, 2019.
3. A Conference and the Tutorial Classes on **10th International Conference on Computing, Communications and Networking Technologies (ICCCNT-2019), IIT Kanpur**, July 6-8th, 2019.
4. A Conference and the Tutorial Classes on “**PEDES-12, International Conference IEEE Conference,**” at **Trivandrum**, Participated, Dec. 14-17th, 2016.
5. A Conference and the Tutorial Classes on “**IICPE-14, International Conference IEEE Conference,**” at **NIT Kurukshetra**, Participated, Dec. 8-10th, 2014.
6. A QIP program topic on “**Multi-level inverter,**” at **IIT Roorkee**, Participated Dec. 2013.
7. A member of the student organizing committee “**CERA-13 International Conference IEEE Conference,**” at **IIT Roorkee**, Participated, 3 -5th Oct. 2013.
8. A Conference and the Tutorial Classes on “**INDICON-13 International Conference IEEE Conference,**” at **IIT Bombay**, Participated, Dec. 13-15th, 2013.
9. A Conference and the Tutorial Classes on “**PEDES-12 International Conference IEEE Conference,**” at **IISc Bangalore**, Participated, Dec 16-19th, 2012.
10. A Conference and the Tutorial Classes on “**INDICON-12 International Conference IEEE Conference,**” at **Khochi**, Participated, Dec. 7-9th, 2012.
11. A Conference and the Tutorial Classes on “**IICPE-12 International Conference IEEE Conference,**” at **Delhi University, Delhi**, Participated, Dec. 6-8th, 2012.
12. A Conference and the Tutorial Classes “**ICETES-10 International Conference,**” at **Noorul Islam University Kumaracoil**, Participated, Mar. 25-26th, 2010.

PERSONAL DETAILS:

Father's Name:

Late N. Pedda Thirupal Naik

Mother's Name: N Kasamma Bai

Date of Birth: June 9th, 1985

Gender: Male

Caste: ST (Hindhu-Lambadi)

Married/Un-Married: Married

Mobile No.: +918763983981

Email: iitramana@gmail.com &
gpr.ramana@gmail.com

Permanent Address:

H.No. 8-64/1,

Mustepalli (Village),

Atmakur (Mandal),

Kurnool (District),

Andhra Pradesh-518422

Current Address: FRB-303, NIT Rourkela,
Rourkela

Sundergarh (Dt),
Orissa-769008

REFERENCES:**1. Dr. S. P. Singh**

Emeritus Professor, Electrical Engg. Dept.,
IIT Roorkee, Uttarakhand-247667.
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2. Dr. Mukesh Kr. Pathak

Professor, Electrical Engg. Dept.,
IIT Roorkee, Uttarakhand-247667.
Email: mukeshpathak@gmail.com &
mukesfee@ee.iitr.ac.in

Mobile No.: +91-9458314144

Land line No: +91-1332285220

DECLARATION:

I hereby declare that the above-furnished details are fully true to the best of my knowledge and belief.

Date: 06/11/2023

Place: Rourkela

(Dr. Venkata Ramana Naik N.)